



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/605,637      | 06/28/2000  | Hiroki Yoshida       | 018775-795          | 6560             |

21839 7590 12/03/2003

BURNS DOANE SWECKER & MATHIS L L P  
POST OFFICE BOX 1404  
ALEXANDRIA, VA 22313-1404

EXAMINER

WU, JINGGE

ART UNIT PAPER NUMBER

2623

DATE MAILED: 12/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/605,637

Applicant(s)

YOSHIDA, HIROKI

Examiner

Jingge Wu

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1,2,7-10,12,13 and 18-20 is/are rejected.
- 7) ☐ Claim(s) 3-6,11 and 14-17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Response to Amendment***

1. Applicants' response to the last Office Action, filed September 9, 2003 has been entered and made of record.

***Remarks***

2. Applicant's arguments with respect to claims 1 and 10 regarding to Nakamura have been fully considered, but they are not persuasive.

- a. Applicant argues that 1) Table 1 on page 8 is an exemplary preferred embodiment and claims 1 and 10 does not teach the embodiment; and 2) It is no clear that whether Nakamura teaches the concept of classifying the skin colors beforehand.

In response to applicant's argument, Examiner would like to point out that claim language is given its broadest reasonable interpretation. The specification is not measure of invention. Therefore, limitations contained therein can not be read into the claims for the purpose of avoiding the prior art. In re Sporck, 55CCPA 743, 386 F. 2d 924, 155 USPQ 687 (1968). In the instant case, first, the content of the table 1 on page 8 does not include in the claims 1 and 10, e.g. no shifting center of gravity is mentioned in claims 1 and 10. Thus, the teachings in Table 1 can not be read into the claims 1 and 10 for the purpose of avoiding Nakamura. Second, the broad claim language in claims 1 and 10 calls for "extracts skin areas ... according to the classification of the characteristic of a plurality of skin colors". Nakamura expressly teaches that using the histograms to classify the colors of the input image, specifically, "It is decided which divided mountain each picture element belongs by judging which hue value range the hue value of each picture element belongs to and many picture elements are **classified** into groups (clusters) corresponding to the divided mountains" (col. 2 lines 61-65).

Art Unit: 2623

Finally, Nakamura clearly shows that extraction of skin color according to the classifications of the skin colors and correcting the skin colors (see office action).

Therefore, the 102 rejection is proper.

b. Applicant further argues 1) dependent claims 12, 13 and 19 dependent from claim 10 are also patentable over Nakamura; 2) the Examiner merely refers to large blocks of the Nakamura. The reference to multiple columns of text to identify each element is not helpful.

In response to applicant's argument, Examiner would like to point out that claim 12 is an independent claim and claims 13-20 depend from claim 12. In addition, claim 12 is corresponding computer-readable storage medium claim to claim 1. the discussions are addressed with regard to section a. The Examiner would also like to point out that the burden of prove after office action is on the Applicant for Nakamura does not teach the claimed invention. The Applicant needs at least to read the Nakamura in order to meet the burden of prove. The citations of the Examiner is only to help the Applicant to understand the rejection and Nakamura. In section a., the Examiner has already pointed out the specificity the applicant requested. The citation is within the cited portion in the office action.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2623

4. Claims 1-2, 8, 10, 12-13, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5309228 to Nakamura.

As to claim 1, Nakamura discloses an image processor, wherein characteristics of plurality of skin colors are classified beforehand, comprising:

an area extractor which extracts skin areas from input image data according to the classification (clustering) of the characteristics of a plurality of skin colors (Figs. 2 and 7, col. 2 line 14-col. 5 line 39, col. 14 lines 40-54); and

an image corrector which corrects image data of each of the skin area extracted by said area extractor according to the characteristics of the skin color of the each of the skin areas (Fig. 2, 8-11, col. 4 line 3-col. 5 line 39, col. 14 line 56-col. 17 line 58, col. 23 line 14-col. 24).

Claims 2, Nakamura further discloses the area extractor determines the characteristic of the skin areas according to average, dispersion (distribution), and center of gravity from a histogram of image data of each of the skin area (col. 15 line 56-col. 16 line 17, col. 28 lines 19-68).

As to claims 8 and 19, Nakamura further discloses the area extractor extracts the candidates areas from image data, converts the color specification system of the image data for each of the skin candidate area based on the image data in the color specification system (col. 20-col. 22).

Claims 10, 12, and 13 are the corresponding method and computer readable medium claims to claims 1 and 4 respectively. The discussion are addressed with regard to claims 1 and 2.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 9 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura.

As to claim 9, Nakamura discloses all limitations (Fig. 4a-c, and Fig. 22, col. 13-14, col. 27-28) except rectangle area and threshold of hue for the pixels.

Examiner takes Official Notice that those features are notoriously well known in the art, e.g. dividing the image into blocks and thresholding a color pixel.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the features in the system of Nakamura in order to accurately extract the colored skin area from the image.

7. Claims 7 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura in view of US 5075788 to Funda.

As to claims 7 and 18, Nakamura discloses all limitations (Fig. 4a-c, and 15, col. 13-14, col. 15 line 56-col. 18, col. 23-25) except generating a correction curve.

Funda, in an analogous environment, discloses the step of generating a correction curve by modifying the color histogram (col. 10 lines 48-59 and col. 11 lines 41-col. 12).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the curve of Funda in the system of Nakamura in order to accurately correct the colored skin area from the image (Funda, col. 1 lines 11-48).

***Allowable Subject Matter***

8. Claims 3, 11, and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 4-6 and 15-17 depend from claims 3 and 14 are, therefore, objected.

***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Contact Information***

Art Unit: 2623

10. Any inquiry concerning this communication or earlier communications should be directed to Jingge Wu whose telephone number is (703) 308-9588. He can normally be reached Monday through Thursday from 8:00 am to 5:30 pm. The examiner can be also reached on second alternate Fridays.

Any inquiry of a general nature or relating to the status of this application should be directed to TC customer service whose telephone number is (703) 306-0377.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Amelia Au, can be reached at (703) 308-6604.

The Working Group Fax number is (703) 872-9314.

Jingge Wu

Primary Patent Examiner

